



Company Announcement Office
Australian Securities Commission Limited
Sydney NSW

10 August 2010

MOU SIGNED FOR CYCLONE (ZIRCON RICH) HEAVY MINERAL SANDS PROJECT

- MOU signed with biggest Chinese end user
- Funding for the Cyclone Project

Diatreme Resources Limited (ASX:DRX) is pleased to announce a significant step forward in the potential development of the Cyclone (Zircon rich) Heavy Mineral Sands Project (“the Cyclone Project”) through the signing today of a Memorandum of Understanding (“MOU”) with BaoTi Group Ltd (“BaoTi”), based in Shaanxi Province, central China.

Under the terms of the MOU, and following the completion of a due diligence process, BaoTi intends reaching agreement with DRX to:

1. Undertake an equity investment in DRX to secure a position as a substantial shareholder;
2. Jointly develop the Cyclone Project, through a joint venture in which BaoTi can earn a significant stake in the Project

The MOU is subject to approvals from the central Chinese government(s) and/or the Australian Foreign Investment Review Board (“FIRB”).

Following agreement between the parties, the terms and conditions would be incorporated into a Heads of Agreement (“HOA”), including earn-in provisions, management of the joint venture, the location of a Mineral Separation Plant and any product offtake entitlements.

A working group is to be set up to progress the HOA in a timely manner. Both DRX and BaoTi have agreed to negotiate and sign the HOA within three (3) months of the MOU. Once the HOA has been signed, a Joint Venture Management Committee would be established.

If the conditions of the MOU are not met within 100 days from the date of the MOU, then DRX and/or BaoTi have the option of terminating or renegotiating renewal of the MOU.

Diatreme’s Executive Chairman, Mr Tony Fawdon said:

“The signing of this MOU confirms a highly positive approach by BaoTi toward the ultimate feasibility and development of the Cyclone Deposit in Western Australia, in conjunction with Diatreme.



BaoTi's commitment, as a highly respected Chinese end user and exporter of heavy mineral products, is a sign that the zircon rich deposit would be open to the injection of investment funds on a scale beyond what may likely be achieved under current market circumstances through traditional debt and equity means.

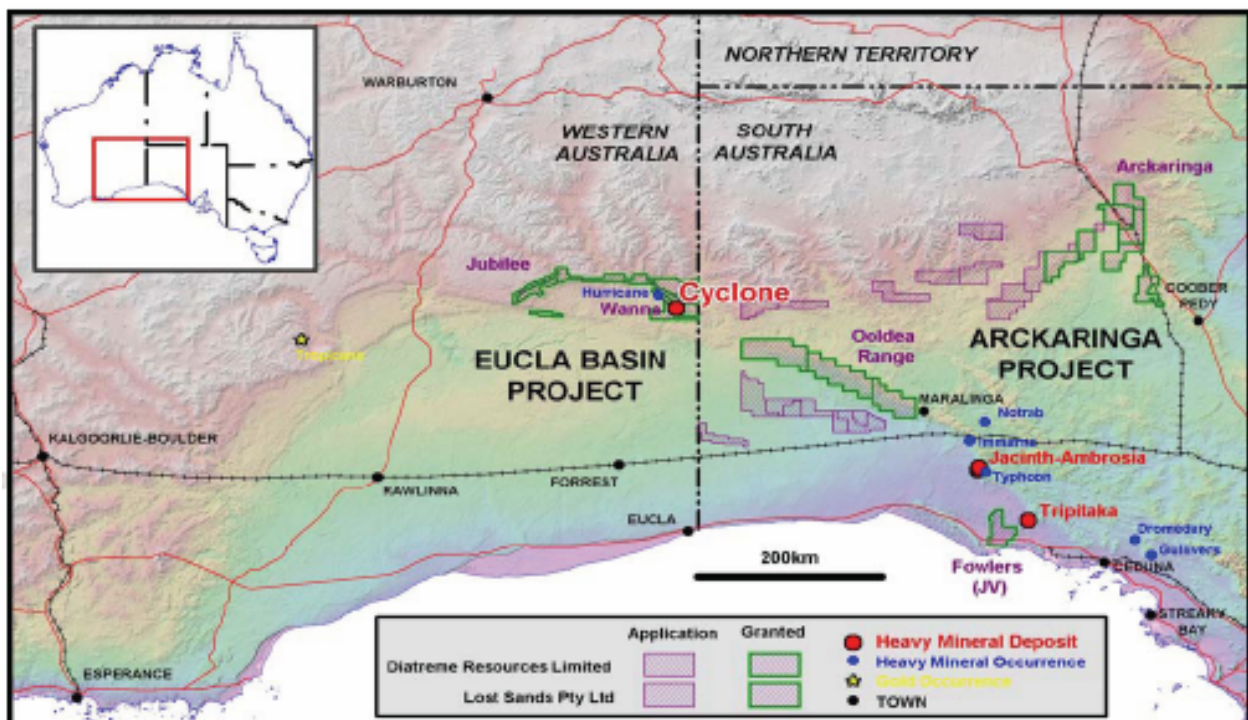
Diatreme looks forward to a successful partnership with BaoTi as both groups work toward Cyclone's development."

Earlier this year, Diatreme released the results of a scoping study on the Cyclone deposit which showed positive results for a 9 million tonnes per annum operation producing 280,000 tonnes of concentrate. The study showed that there was the potential to generate \$50 million annual average profit for 10 years. Projected capital expenditure totals \$311 million. With the positive results Diatreme launched pre-feasibility studies with the aim of developing Cyclone into a profitable mining operation by 2014.

Diatreme has conducted more than 42,500 metres of drilling at Cyclone, with the mineralisation covering an area up to 5 kilometres long and up to 2.5 kilometres wide. The deposit is believed to be amenable to typical mineral sands mining methods, and is low in slimes and induration, thereby reducing mining costs.

The resource currently stands at 98.4 million tonnes averaging 2.88% heavy minerals.

Category	Million tonnes	% HM	% Slimes	% Oversize
Inferred	2.51	2.38	3.53	4.08
Indicated	84.36	2.82	4.40	5.91
Measured	11.52	3.44	4.51	4.72
TOTAL	98.40	2.88	4.39	5.72



Location of the Cyclone HM Deposit



About BaoTi

- The leading zircon and titanium fabrication company in China and presently dominates Chinese exports in zircon and titanium end user products, having an 80% market share.
- China's biggest production, research and development base for titanium and its alloys, with its output of titanium mill products ranked second in the world.
- As a leader in technology and production and holding a significant domestic market share, it produces a wide variety of products made from titanium, zircon, tungsten, molybdenum and rare earth metals.
- Employs a workforce in excess of 7,000 personnel within its whole titanium industry chain which includes mining, smelting, rolling, downstream production and titanium equipment manufacturing.

About Diatreme Resources

Diatreme is a diversified Australian mineral explorer with significant projects in heavy mineral sands, copper, base metals and gold. Based in Brisbane, Queensland, the company listed on the Australian Securities Exchange in June 2005. The Board and senior personnel have wide experience in the exploration and development phases of resource management.

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.

Global zircon consumption in 2008 was estimated at 1.3 million tonnes, with China the largest single consumer followed by Western Europe, North America, Japan and other countries.

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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.