



Company Announcement Office  
Australian Securities Exchange  
Level 4, 20 Bridge Street  
Sydney NSW 2000

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## Mining Lease Application - Cyclone Zircon Project

**An important milestone in the Cyclone Project history has occurred with Diatreme Resources Limited ("DRX") lodging a Mining Lease application (M69/141) totaling 1,560 hectares in area over the Cyclone heavy mineral resource (Figure 1).**

**The Cyclone resource currently stands at 132.1 million tonnes (Mt) grading 2.33% heavy minerals (HM) at a 1% HM cut-off grade and containing 3.1Mt HM (within DRX ground), of which >40% is classified as Measured (Table 1).**

Investigations are continuing in determining a haul road route from the mining lease to the most suitable railhead on the Trans Australian Railway, along with assessing future mine infrastructure such as water supplies, plant, stockpiles, airstrip and offices.

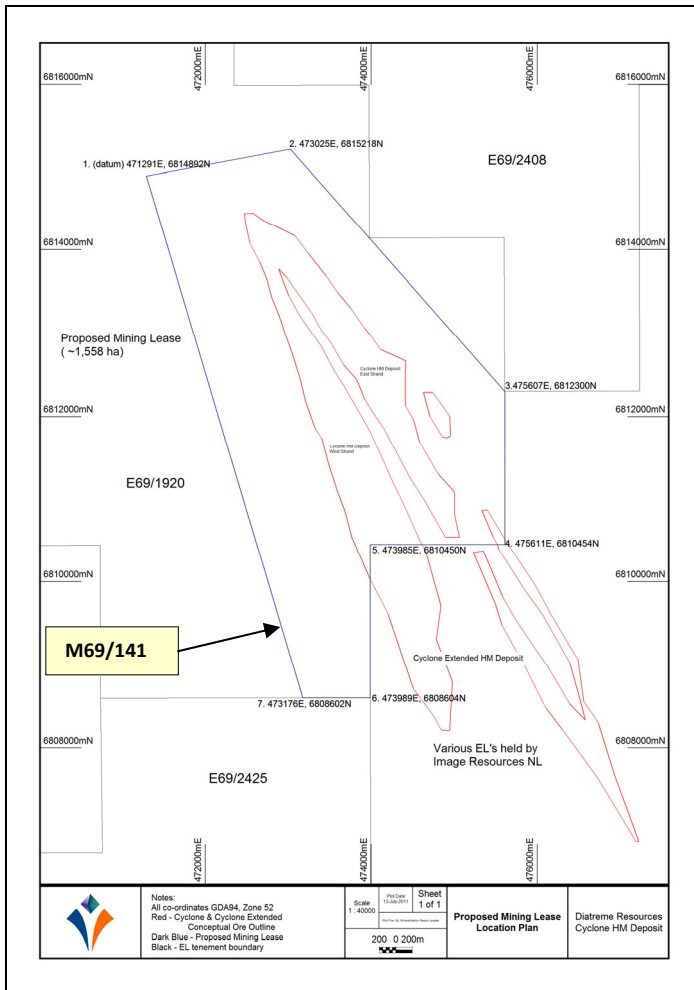
The current project timeline provides for completion of the current Pre-Feasibility Study in 2011, with a Definitive Feasibility Study to follow immediately targeting completion by the end of 2012. Allowing for project financing and construction activity, mining is scheduled to commence early in 2015.

Bulk sample testwork has shown that zircon recovery is very good and will equate to 80% of the project's revenue stream, although zircon represents only 33% of the HM assemblage. The assemblage also contains rutile, leucoxene, Hi Ti oxide, altered ilmenite and minor ilmenite.

A small test pit has been excavated in the mineralized overburden to establish geotechnical characteristics of the deposit and mining fleet requirements. This comparison of pit observations with observations from previous resource aircore drilling undertaken during exploration, will assist in developing future mining techniques.

With steady growth being experienced in the HM sector prices, the project's viability continues to strengthen.

**Tony Fawdon**  
Executive Chairman/CEO



**Figure 1: Cyclone Deposit Mining Lease Application M69/141 (August 2011)**

**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 of Mr David Jelley, who is a full time employee of Diatreme Resources Limited and 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.

Category	HM cut-off %	Material Mt	HM %	HM Mt	Slimes %	Oversize %	Percentage in HM				Zircon Kt	Rutile Kt
							Zircon %	Rutile %	HiTi %	Alt Ilm %		
MEASURED	1.0	49.7	2.7	1.32	4.5	5.3	32.2	12.7	16.8	10.0	426	169
INDICATED	1.0	72.2	2.2	1.59	4.2	6.0	32.3	12.7	18.0	12.8	513	202
INFERRED	1.0	10.2	1.7	0.17	3.6	8.9	33.6	10.9	23.0	21.4	58	19
TOTAL	1.0	132.1	2.3	3.08	4.3	5.9	32.4	12.6	17.9	12.4	998	388

**Notes:**

- Rounding may generate differences in last decimal place
- A constant SG of 1.7 has been used to derive material tonnes
- Slimes refers to material <53um
- Oversize refers to material >2mm
- Mineral Assemblage derived from QEMSCAN analysis
- HiTi - Ti-Fe oxides (HiTi and leucoxene) containing 70 - 95% TiO2
- Altered Ilmenite - Ti-Fe oxides containing 55 - 70% TiO2

**Table 1: Cyclone Resource Estimate**