

**ASX Announcement**  
4 September 2009**TICK HILL & IRONHURST PROJECTS**  
(DRX 100%)**EXPLORATION UPDATE**

**Through agreement with Xtreme Resources Limited (“XRL”), Diatreme Resources Limited (“DRX”) has regained ownership of the Tick Hill Gold and Ironhurst Base Metal/Gold projects in northwest Queensland.**

**TICK HILL GOLD PROJECT (100% DRX)**

The Tick Hill Gold Project, situated 110km SSE of Mt Isa in north-west Queensland, was originally acquired by DRX in 2004 under an option agreement with Mount Isa Mines Limited (“MIM”), the holder of granted mining lease numbers 7094, 7096 & 7097. During the period 1991-1995 MIM produced 513,333 ounces of gold from 705,000 tonnes ore at a head grade of 22.6 g/t gold from both open pit and underground.

In late 2005, DRX completed eight RC drill holes totalling 1,691m in following up an identified Induced Polarisation anomaly at the northern end of the old open pit. Further follow-up exploration was suspended at the time in anticipation of the project's inclusion within a proposed IPO for XRL.

With a change in circumstances, it was determined that DRX would exercise the option with MIM to acquire a 100% interest in the project (as per the 2004 agreement). That process is now underway.

DRX has further identified:

- A drill target zone for potential extensions of the Tick Hill high grade lode; such zone appears to be faulted and/or folded to the northwest at depth.
- A drill target zone under surface alluvial gold material to the east of the old open pit, to test for further faulted extensions to the previously mined lode.

DRX will be testing these potential targets once the option exercise process is finalised and the leased assigned.

The mining leases have an existing 300m deep decline and ventilation shaft, both flooded at this time. If further mineralisation is found at depth through surface based drilling then it may be possible to recommission this infrastructure to operate underground exploration and possible mining.

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 30,000 sq km 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:  
177,093,250  
Unlisted 47c options (30 June 2011):  
17,550,000  
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

**Key Projects:**  
• Eucla Basin Heavy Minerals Project  
• Clermont Copper Project  
• Anabama Copper Project  
• Bellfield Base Metals Project  
• Tick Hill Gold Project

**Diatreme Resources Contact:**  
Tony Fawdon  
Executive Chairman  
Phone: +61 7 3832 5666  
Fax: +61 7 3832 5300

**Share Registry:**  
Link Market Services  
Level 19, ANZ Building  
324 Queen Street, Brisbane, Q4000



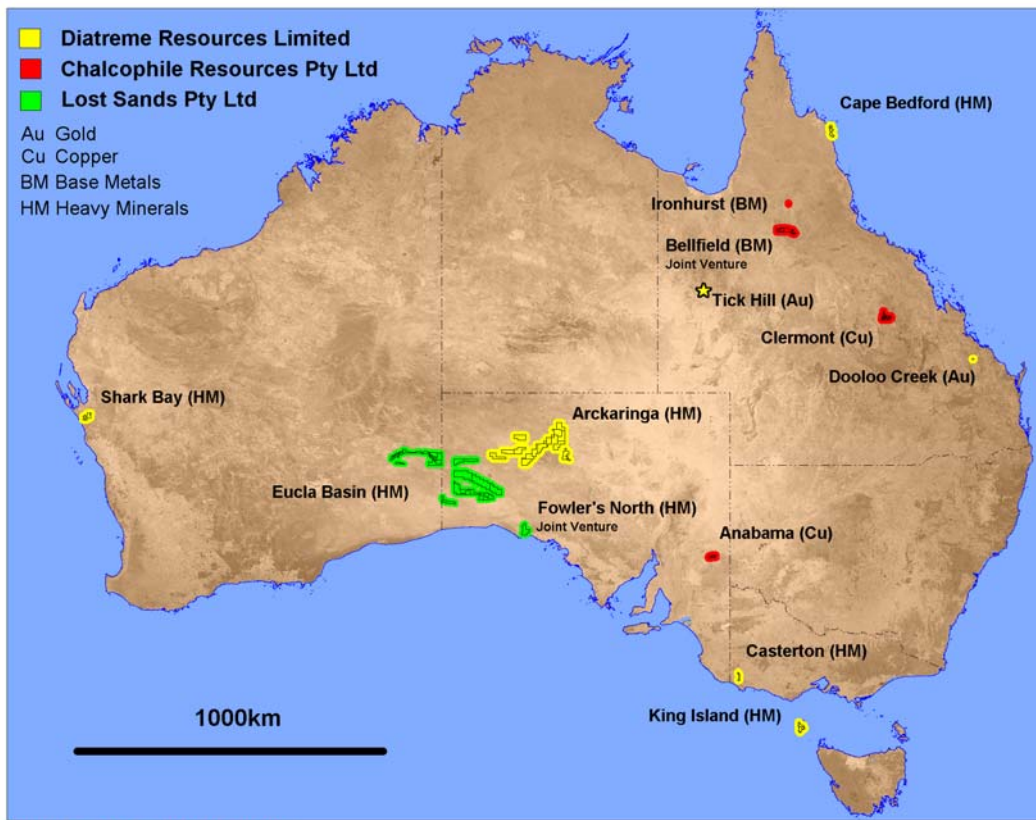
### IRONHURST BASE METALS/GOLD PROJECT (100%)

The Ironhurst Project (EPM 12976), located 40km north of Georgetown, north Queensland, contains a felsic volcanic breccia (the Ironhurst Breccia) which has similar geological characteristics to economically significant deposits of the style in north Queensland such as Kidston, Mount Leyshon, Red Dome and Mt Wright.

Previous drilling by DRX and XRL encountered moderately high zinc and silver values in the shallow parts of the breccia system. Potential remains for gold mineralisation beneath the shallow zinc and silver zone.

**DRX looks forward to undertaking exploration on these two highly attractive gold/base metal projects which both add value to the Company's tenement portfolio.**

### Locations of Australian Projects



**Anthony J Fawdon**  
Executive Chairman/CEO

Company contact details:

Tel : +61 7 3832 5666  
Fax : +61 7 3832 5300  
Email : [manager@diatreme.com.au](mailto:manager@diatreme.com.au)

### 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.