

ASX

ANNOUNCEMENT



NEW DRILLING COMPLETED AT TICK HILL GOLD PROJECT

Diatreme Resources Limited is an Australian based diversified mineral explorer with significant projects in WA and QLD.

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

Australian Securities Exchange
Codes: DRX, DRXO

Board of Directors - Non-Executive:
William Wang - Chairman
Andrew Tsang
Daniel Zhuang

Executive:
Neil McIntyre – Chief Executive
Tuan Do – CFO & Co. Secretary
Ian Reudavey – Chief Geologist

Key Projects:

- Cyclone Zircon Project
- Tick Hill Gold Project
- Cape Bedford Silica/HMS Project
- Clermont Copper Project

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HIGHLIGHTS

*** Second stage in-fill drilling program completed in early September at Tick Hill Gold Project near Mount Isa, Qld, comprising 31 drill holes for 218 metres drilled, focused on the former mine's tailings storage facility**

*** 200 samples submitted for gold grade analysis and 2 bulk samples for preliminary metallurgical testing; results expected within 2-6 weeks**

*** Subject to drilling results, scoping study for tails re-processing planned at previously one of Australia's highest grade gold deposits**

Diatreme Resources Limited (ASX:DRX) has completed a second stage of drilling at the Tick Hill Gold Project near Mount Isa, Qld, following recent positive reconnaissance drilling results.

Conducted with joint venture partner Superior Resources Limited (ASX:SPQ), the drilling program focused on the tailings storage facility (TSF) at the former mine, which previously was one of Australia's highest grade gold deposits.

It followed recent reconnaissance drilling (refer ASX announcement 10 August 2015) which showed an average overall grade of **1.04 grams/tonne (g/t) Au** (gold) for the tailings dam, based on 24 aircore drill holes.

Diatreme's CEO Mr Neil McIntyre said: "Tick Hill has already shown encouraging results and we aim to quickly determine the project's potential to become a profitable source of revenue for the company."

2nd Stage Drilling Program

Utilising a DRX-owned air-core drill rig and DRX staff, a total of 31 drill holes were undertaken, resulting in 218 metres drilled and 200 down-hole geochemical samples taken at one metre intervals (Figure 1). The drill holes were located on an offset 50 metre by 50 metre grid, which in-filled the holes drilled during the first stage drilling program.

A total of 200 samples have been submitted for gold analysis. In addition, composited bulk samples taken from five drill holes along the central N-S infill line in each of the TSF paddocks have been submitted for preliminary metallurgical test work to determine the characteristics of the tailings material and the gold mineralisation.

Results from the gold analysis and metallurgical test work are expected within two weeks and six weeks, respectively.

The objectives of the second stage program were to:

- further define the gold grade distribution throughout the TSF;
- obtain additional geological and assay data to facilitate a mineral resource estimate; and
- obtain representative bulk samples for preliminary metallurgical test work.

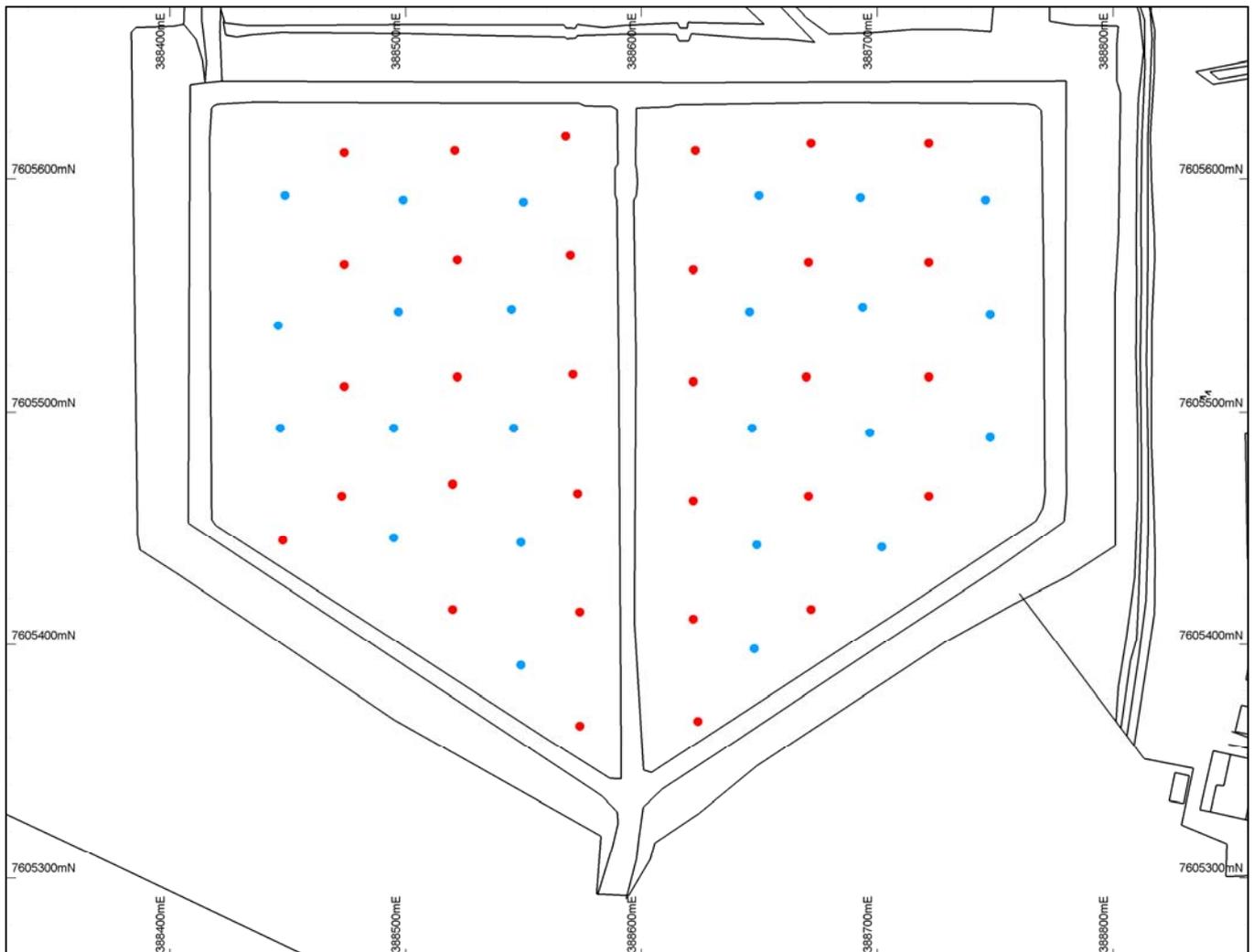


Figure 1. Tick Hill Tailings Storage Facility – September infill drilling (Red) and Reconnaissance drilling program (Blue)

Further Work – Scoping Study

Subject to the results of the further assaying and metallurgical test work, a scoping study will be undertaken to determine the economic potential for re-processing the tailings material to extract the gold.

Mr McIntyre said: “Diatreme has an attractive portfolio of mining projects, led by our flagship Cyclone Zircon Project, and we are focused on extracting maximum value by rapidly progressing our highest value projects. Tick Hill’s location in one of Queensland’s most famous mining districts, its past history as a high-grade gold mine and the potential for increased revenue due to the depreciating Australian dollar have increased the promise of this project to provide attractive near-term returns for shareholders.”

About Tick Hill

The Tick Hill Gold Project comprises three granted Mining Lease No’s 7094, 7096 and 7097, each with an area of 130ha for a total area of 390ha. The Tick Hill Gold Deposit was mined between 1991 and 1995 by Carpentaria Gold Pty Ltd (a subsidiary of MIM Holdings Limited) for the production of 513,333 ounces of gold from 705,000 tonnes of ore at a recovered grade of 22.6 g/t gold (source: MIM Holdings Limited – Annual Reports). This makes it one of the highest grade gold deposits in Australia’s recent gold producing history.

The plant comprised crushing and milling circuits delivering a product with a p80 of 70µm to a CIL circuit. Tailings were discharged in to a tailings dam comprising two paddocks of a “turkeys nest” construction in which a perimeter embankment with a clay core retained tailings. Wall heights ranged from 6m to 10.5m. Since decommissioning, the surface has been capped and both the surface and batters seeded, with good vegetation cover now present. The tailings dam covers approx. 8ha and could contain between 600,000 – 650,000t of tailings material based on historical records and the as-built mine layout.



Neil McIntyre
CEO

Competent Person Statement

The information in this report, insofar as it relates to Exploration Results is based on information compiled by Mr Ian Reudavey, who is a full time employee of Diatreme Resources Limited and a Member of the Australian Institute of Geoscientists. Mr Reudavey 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 2012 Edition of ‘The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Reudavey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.